



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2019-0442; Product Identifier 2018-NM-171-AD]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to supersede Airworthiness Directive (AD) 2017-15-04, which applies to certain The Boeing Company Model 787-8 and 787-9 airplanes. AD 2017-15-04 requires replacement of affected electromechanical actuators (EMAs). Since AD 2017-15-04 was issued, the FAA has determined that discrepant EMAs may have been installed on airplanes outside the original applicability of AD 2017-15-04. This proposed AD would retain the requirements of AD 2017-15-04, expand the applicability to include all The Boeing Company Model 787 series airplanes, and add a new requirement to identify, for certain airplanes, the part number of EMAs and replace affected EMAs. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet <https://www.myboeingfleet.com>. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0442.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0442; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the regulatory evaluation, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Douglas Tsuji, Aerospace Engineer, Systems and Equipment Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3548; email: douglas.tsuji@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2019-0442; Product Identifier 2018-NM-171-AD” at the beginning of your comments. The FAA specifically invites comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. The agency will consider all comments received by the closing date and may amend this NPRM because of those comments.

The FAA will post all comments, without change, to <http://www.regulations.gov>, including any personal information you provide. The FAA will also post a report summarizing each substantive verbal contact the agency receives about this proposed AD.

Discussion

The FAA issued AD 2017-15-04, Amendment 39-18964 (82 FR 33785, July 21, 2017) (“AD 2017-15-04”), for certain The Boeing Company Model 787-8 and 787-9 airplanes. AD 2017-15-04 requires replacement of affected EMAs. AD 2017-15-04 resulted from a report of wire harness chafing on the EMAs for certain spoilers due to insufficient separation with adjacent structure. The FAA issued AD 2017-15-04 to address chafing and consequent wire damage that could result in a potential source of ignition in the flammable leakage zone—an area of the airplane where flammable fluids have the potential to accumulate—and a consequent fire or explosion.

Actions Since AD 2017-15-04 Was Issued

Since the FAA issued AD 2017-15-04, the agency has determined that, because the affected EMAs are rotatable parts, these affected EMAs could be installed on airplanes that did not fall within the applicability of AD 2017-15-04, thereby subjecting those

airplanes to the unsafe condition. In addition, Boeing issued Boeing Service Bulletin B787-81205-SB270030-00, Issue 002, dated April 7, 2017, which removes two airplanes from the effectivity, includes minor editorial changes, and does not require additional work for airplanes on which the actions required by AD 2017-15-04 were accomplished.

Related Service Information under 1 CFR part 51

The FAA reviewed Boeing Service Bulletin B787-81205-SB270030-00, Issue 002, dated April 7, 2017. The service information describes procedures for replacing affected EMAs with new EMAs.

This proposed AD would also require Boeing Service Bulletin B787-81205-SB270030-00, Issue 001, dated October 22, 2015, which the Director of the Federal Register approved for incorporation by reference as of August 25, 2017 (82 FR 33785, July 21, 2017).

These documents are distinct since they apply to different airplanes. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA's Determination

The FAA is proposing this AD because the agency has evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Proposed AD Requirements

This proposed AD would retain all of the requirements of AD 2017-15-04, and expand the applicability to include all The Boeing Company Model 787 series airplanes. This proposed AD would also require an inspection or records check to identify the part number of the EMA, and for airplanes with affected EMAs, accomplishing the actions

specified in the service information described previously, except as discussed under “Differences Between this Proposed AD and the Service Information.”

For information on the procedures and compliance times, see this service information at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0442.

Differences Between this Proposed AD and the Service Information

The effectivity of Boeing Service Bulletin B787-81205-SB270030-00, Issue 002, dated April 7, 2017, is limited to certain The Boeing Company Model 787-8 and 787-9 airplanes. However, the applicability of this proposed AD includes all The Boeing Company Model 787 series airplanes. Because the affected EMAs are rotatable parts, the FAA has determined that these parts could be installed on airplanes that were initially delivered with acceptable EMAs, thereby subjecting those airplanes to the unsafe condition.

Costs of Compliance

The FAA estimates that this proposed AD would affect 93 airplanes of U.S. registry. The agency estimates the following costs to comply with this proposed AD:

Estimated costs for required actions

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
EMA replacement (retained actions from AD 2017-15-04)	32 work-hours X \$85 per hour = \$2,720 per EMA replacement	*	\$2,720*	Up to \$252,960*
Inspection/ records check	1 work-hour X \$85 per hour = \$85	\$0	\$85 per inspection cycle	\$7,905

*Parts cost is not included in the service information, but Boeing has indicated that existing parts can be modified to become the new parts.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This proposed AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes and associated appliances to the Director of the System Oversight Division.

Regulatory Findings

The FAA has determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the proposed regulation:

(1) Is not a "significant regulatory action" under Executive Order 12866,

(2) Will not affect intrastate aviation in Alaska, and

(3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2017-15-04, Amendment 39-18964 (82 FR 33785, July 21, 2017), and adding the following new AD:

The Boeing Company: Docket No. FAA-2019-0442; Product Identifier 2018-NM-171-AD.

(a) Comments Due Date

The FAA must receive comments on this AD action by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2017-15-04, Amendment 39-18964 (82 FR 33785, July 21, 2017) (“AD 2017-15-04”).

(c) Applicability

This AD applies to all The Boeing Company Model 787 series airplanes, certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 27, Flight Controls.

(e) Unsafe Condition

This AD was prompted by wire harness chafing on the electro-mechanical actuators (EMAs) for certain spoilers due to insufficient separation with adjacent structure. The FAA is issuing this AD to address chafing and consequent wire damage that could result in a potential source of ignition in the flammable leakage zone and a consequent fire or explosion.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Retained EMA Replacement, With Revised Compliance Language

This paragraph restates the requirements of paragraph (g) of AD 2017-15-04 with revised compliance language. For airplanes identified in Boeing Service Bulletin B787-81205-SB270030-00, Issue 001, dated October 22, 2015: Within 40 months after August 25, 2017 (the effective date of AD 2017-15-04), replace the EMAs with new EMAs, in accordance with the Accomplishment Instructions of Boeing Service Bulletin B787-81205-SB270030-00, Issue 001, dated October 22, 2015; or Boeing Service Bulletin B787-81205-SB270030-00, Issue 002, dated April 7, 2017.

(h) New Definition

For the purpose of this AD, an “affected part” is an EMA for spoiler 4, 5, 10, or 11 having part number C99144-004 or C99144-005.

(i) New EMA Identification and Replacement

For airplanes not identified in paragraph (g) of this AD with an original airworthiness certificate or an original export certificate of airworthiness dated before or on the effective date of this AD, do the actions specified in paragraphs (i)(1) and (i)(2) of this AD.

(1) Within 40 months after the effective date of this AD, perform a general visual inspection of the EMAs for spoilers 4, 5, 10, and 11 to determine the part number. A review of airplane maintenance records is acceptable in lieu of this inspection if the part number of the EMA can be conclusively determined from that review.

(2) If the EMA is an affected part: Within 40 months after the effective date of this AD, replace the EMA in accordance with the Accomplishment Instructions of Boeing Service Bulletin B787-81205-SB270030-00, Issue 002, dated April 7, 2017.

(j) Parts Installation Prohibition

As of the effective date of this AD, do not install on any airplane an EMA having part number (P/N) C99144-004 or C99144-005.

(k) Credit for Previous Actions

This paragraph provides credit for the action specified in paragraph (i)(2) of this AD, if those actions were performed before the effective date of this AD using Boeing Service Bulletin B787-81205-SB270030-00, Issue 001, dated October 22, 2015.

(l) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in

paragraph (m)(1) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by The Boeing Company Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO Branch, FAA, to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(4) AMOCs approved previously for AD 2017-15-04 are approved as AMOCs for the corresponding provisions of paragraph (g) of this AD.

(5) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (l)(5)(i) and (l)(5)(ii) of this AD apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. If a step or substep is labeled “RC Exempt,” then the RC requirement is removed from that step or substep. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator’s maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

(m) Related Information

(1) For more information about this AD, contact Douglas Tsuji, Aerospace Engineer, Systems and Equipment Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3548; email: douglas.tsuji@faa.gov.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet <https://www.myboeingfleet.com>. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. You may view this referenced service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

Issued in Des Moines, Washington, on June 14, 2019.

Michael Kaszycki,
Acting Director,
System Oversight Division,
Aircraft Certification Service.

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